Sumner Fire Department: The Efficiency and Effectiveness of a Company-level Inspection Program

Strategic Management of Change

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ABSTRACT

Like most fire service agencies, Sumner Fire Department has attempted to respond to public demands for productivity, efficiency, and effectiveness. One program resulting from these efforts is its company-level inspection program. However, fire department management had never evaluated the program to determine the existence of efficiencies and effectiveness.

The purpose of the research was to evaluate the efficiency and effectiveness of the company-level inspection program. Using historical, descriptive, and evaluative research methods, the following questions were answered:

1. Does the current company-level inspection program demonstrate the efficient use of fire department resources?
2. What affect does the inspection program have on the daily workload of each shift?
3. Has the program resulted in a measurable benefit to the community?

The research revealed that the Sumner Fire Department is maximizing the use of its human resources. It also demonstrated these efficiencies have impacted the workload of company-level personnel to the extent that there is likely work being left undone because of the workload placed upon company-level personnel. Finally, while the fire department's fire rate is less than that experienced by others, there was no clear evidence that the program has benefited the community during the years that were studied.

The recommendations from this study expressed the need to conduct broader-based research to measure the benefit the community receives from this program. It was further recommended that the program be altered to the extent that the workload demands of the program become manageable within the constraints of available time.

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INTRODUCTION

Tradition. This is a word that is often used in describing elements of the fire service. It is used in explaining how we do things, why we do things, and when we do things. When used in the proper context, the word "tradition" is used to describe things that are important, valued, and relevant.

Unfortunately, there is another side to the word "tradition", another definition. In this case, "tradition" is defined as a practice, policy, procedure, or program that has existed for such a long period of time, no one can recall why this particular "tradition" was began in the first place. This is perhaps best illustrated by the following story.

A young newlywed couple is preparing dinner for Easter Sunday. In preparing the ham, the husband notices that his wife cuts approximately one inch off each end of the ham. Being curious, he asks his wife why she did this. The wife responds, "It's tradition. That's the way my mother always cooked ham."

Not being satisfied with that answer, the husband calls his mother-in-law, asking her why she had always cut the ends off the ham. Her response was identical, "It's tradition. That's the way my mother always cooked ham."

His curiosity not yet satisfied, the following Sunday the husband went to visit his wife's grandfather at the local assisted living facility. When asked the question about cutting the ends off the ham, the grandfather got a puzzled look on his face, then smiled.

His answer was, "Well, my wife only had one roasting pan during our entire marriage. That particular roasting pan was too small for the hams we bought. As such, she had to cut the ends off the ham in order to fit it into the pan."

The point of this story is that we often lose sight of the reasons behind why we began doing something. Many fire service agencies could apply this illustration to many pieces of their operation.

This is exactly where the Sumner Fire Department finds itself with its company-level inspection program. The program, having been started many years ago, has no particular focus i.e. no one really knows why it began, what is expected to be accomplished, or if the program is having any desirous effects.

The purpose of this applied research project is to evaluate the Sumner Fire Department's company-level inspection program. Specifically, the efficiency and effectiveness of the program will be examined. Utilizing historical, descriptive, and evaluative research methods, the following questions will be answered:

1. Does the current company-level inspection program demonstrate the efficient use of fire department resources?
2. What effect does this program have on the daily workload of the company personnel?
3. Has the program resulted in a measurable benefit to the community?

BACKGROUND AND SIGNIFICANCE

The fire service, in attempting to demonstrate productivity, value-added, customer-centered service, and so on, has significantly changed itself over the years. Where previously it was an industry that waited for and responded to fires, today it does much more.

The fire service has taken on many new services: emergency medical services; hazardous materials response; confined space rescue; public education; and more. Often, these services

were added without any analysis as to the impact on the agency or the benefit to the public. Frequently, whatever added service was new and popular in the industry caused agencies to add something new to their own growing list of services.

Once added, these services became part of our persona, our tradition. Agencies continued doing things for years without ever evaluating programs, determining efficiencies, effectiveness, and/or the need for change.

However, to truly justify the continuance of these programs, the fire service must begin review of their programs, either on a continuous basis, or, at the very least, a periodic basis.

In answering the identified research questions, the Sumner Fire Department's company-level inspection program will be subjected to such a review or evaluation.

This applied research project is applicable to the National Fire Academy's Executive Fire Officer Program's class "Strategic Management of Change" in the following manner: utilization of the Change Management Module Phase IV: Evaluation.

LITERATURE REVIEW

There existed a significant limitation in conducting a literature review of this subject area. Apart from applied research projects located in the Learning Resource Center of the National Emergency Training Center in Emmitsburg, Maryland and industry-specific publications, there was little found that had specific application to the subject. As such, the review is limited in its scope.

In approaching a literature review on the efficiency and effectiveness of company-level inspection programs, it was deemed necessary to approach the subject from a holistic

viewpoint. To that end, the literature review was used to develop information as to why agencies conduct these programs, what benefits are realized, how the programs are developed, and so on.

For most fire service agencies, the issue of fire suppression companies demonstrating a level of non-emergency productivity during their duty shifts is not new. For those agencies, emergency response crews have performed numerous activities while in-service and away from the fire station. These have included hydrant maintenance, training, area familiarization, and pre-incident building surveys, to name a few ((Marinucci, 1987)

With the publication of "America Burning" in 1974, the focus on the prevention aspect of firefighting created a new horizon in the American fire service. Recognizing that crews were already conducting activities in many of the commercial and industrial occupancies within their jurisdictions, agencies began to explore the use of fire suppression forces in the conduct of code enforcement inspections. Today, in many communities, in-service fire suppression personnel conduct most or all of the regular code enforcement inspections (Smith, 1991).

But does the practice of utilizing company-level personnel provide any benefits beyond the direct link between code enforcement and life safety (Donner, 1997), as the literature would suggest? The information found in the literature provides a resounding yes.

In addition to demonstrating a more proactive approach to fire prevention, it provides benefits to the suppression crews. This, by placing them in occupancies, on a regular basis, to which they may respond, thus increasing their familiarity with the structures and their contents (McMath, 1991). Perhaps most important, David R. Lugo, Jr., in his 1994 paper, "An evaluation of company inspections conducted by Bakersfield Fire Department", suggests that

"prevention is the best way to serve the public". Yet, the public may not recognize or appreciate that statement.

The literature makes perhaps its strongest statement relative to an issue the public does recognize. Virtually all public funded agencies have found it necessary to manage an ever-increasing workload with limited resources. Programs designed to demonstrate the fire service's productivity must be considered.

The use of company-level personnel in the conduct of fire prevention inspections is such a program. These programs increase a department's visibility and enhance its image as a productive organization (Marinucci, 1987; McMath, 1991). This is beneficial in terms of public perception. Further, such programs demonstrate, or appear to demonstrate, the effective and efficient use of available resources (McMath, 1991; Pollard, 1990; Routley, 1991). This provides benefits in terms of elected official and customer perception.

Unfortunately, the literature suggests that not everyone is convinced of the benefits gained through company-level inspections. The issue of productivity gained by having firefighters combine inspection work with their suppression duties can be a touchy subject with the personnel involved. Sometimes the friction can even offset the gains (Schwab, 1987).

The issue appears to be one of workload management (Donner, 1997). Oftentimes, it was questioned whether or not the time necessary to conduct the inspections was actually available to the crews (Campbell, 1994). Unquestionably, code enforcement is time consuming (Holmerud, 1991; McMath, 1991). This is an important issue, one that has forced many agencies to examine their entire daily workload. In doing so, they were forced to consider the time necessary to implement or continue a program (Holmerud, 1991; Pollard, 1990;

Marinucci, 1987; McMath, 1991).

For those agencies that have managed to avoid many of these pitfalls, there were four recurring themes suggested by the literature.

The first of these dealt with the issue of program design. Repeatedly, it was suggested that those personnel that would be expected to deliver the program must be directly involved in the development of the program (McMath, 1991, Pollard, 1990). This included the writing of policies, procedures, and training objectives (McMath, 1991). Ultimately, company-level personnel (lieutenants and captains) were given the authority to and accountability for scheduling and completion of all occupancies assigned them (Barr, 1982; McMath, 1991). Essentially, the personnel became program managers.

The second recurring issue involved a decision process that articulated the level of expertise that would be expected of personnel actually conducting the inspections. Most often, it was considered too difficult to teach the local fire prevention code to all company-level personnel (McMath, 1991). Therefore, these inspection programs were designed to function at a very basic level (Campbell, 1994). Whether designed to inspect certain occupancies, such as small mercantile and business offices (McMath, 1991) or multi-family dwellings (Pollard, 1990), or utilized an organized and thorough checklist applied to all occupancies (Campbell, 1994), it was apparent that these inspections would not be performed at the same level as those that would be performed by a full-time fire inspector.

The third recurring theme, and most frequently noted issue, dealt with the appropriate training of company-level personnel. The literature revealed numerous documents in which the issue of training was a significant portion of the discussion (Campbell, 1994; Pollard, 1990;

Roberts, 1991; Schmidt, 1994; Smith, 1991). In a 1994 applied research paper, a survey conducted by Jim Campbell indicated that "proper and/or on-going training was the key" to a successful program. It was felt that with proper training and support, fire suppression personnel are effective in performing code-enforcement inspections (Roberts, 1991).

The opposite was also indicated. When firefighters were least supportive of fire prevention activities and expressed the least amount of confidence, the single most stated complaint was a lack of proper training (Schmidt, 1994).

The final element that was common to much of the literature dealt with the need for program evaluations. Whether it involved an annual survey of fire personnel to determine if the inspections had helped them in the past year (Pollard, 1990) or provided for the evaluation of factual data to support agency assumptions (Lugo, 1994), the need to evaluate company-level inspection programs was evident. More importantly, the literature suggested that agencies must establish performance criteria, through which program effectiveness is measured, as a form of program evaluation (Barr, 1982; Lugo, 1994; McMath, 1991). The point made was, unless the fire service analyzes its company-level inspection programs, it cannot honestly say that the programs are beneficial and/or productive (Lugo, 1994).

In his 1994 applied research paper, David R. Lugo, Jr. suggests "...programs that are not beneficial or cost-effective must be eliminated or changed".

Having considered the information discovered in the literature review, the decision to conduct an evaluation of the Sumner Fire Department's company-level inspection program was further affirmed.

PROCEDURES

The research procedures used in preparing this paper consisted first of a literature review. The review was conducted initially at the Learning Resource Center, located at the National Fire Academy in Emmitsburg, Maryland, during July and August 1997. Further review was conducted utilizing trade-specific publications provided by the Sumner Fire Department. This secondary review took place between December 1997 and February 1998.

In addition to the literature review, three other methods were utilized in collecting information relative to answering the research questions. Those methods are detailed herein.

Interview

The first of these methods utilized a personal interview process. The purpose of this interview was to provide background or historical information on Sumner Fire Department's company-level inspection program. The following questions were asked:

1. How many years have company-level personnel been conducting fire prevention inspections in Sumner?
2. Describe in detail the current company-level inspection program.
3. Describe how this program has changed over the years.
4. What initial and/or on-going training was/is provided to company-level personnel?
5. Describe the technical nature of the inspections being done today in comparison with inspections done in years past.

Limitations

It was assumed that the individual interviewed was a person having knowledge about the history of the company-level inspection program and provided accurate information. There is,

however, potential for personal bias in the answers provided as the individual interviewed has been responsible for fire marshal duties, including management of the company-level inspection program, for the past ten years.

Workload Analysis

An analysis of the average workload for the on-duty company personnel was conducted.

In order to identify and track the average daily workload of the personnel, a daily activity sheet was developed (Appendix A). While each shift maintained an agency log book, they were asked to utilize the daily activity sheet to record all activities for each twenty-four hour shift. These daily activity sheets were maintained over a three month period.

In keeping track of their time, each captain was asked to track activities very specifically. This meant that if they were conducting hydrant maintenance, they were to note how many hydrants were serviced during that period of time. If they did inspections, they were to note how many were initial inspections and how many were re-inspections. This pattern of documentation was applied throughout the data collection period.

This information was then applied to create an annual time allotment for each identified activity. This provided an annual workload, expressed in hours of work. This was then compared to the total available hours.

As one of the research questions dealt with the issue of the efficiency of a company-level inspection program, the available work hours were further defined, relative to inspections, as the hours between 8:00 AM to 5:00 PM, Monday through Friday, as these are the times during which inspections are conducted.

Limitation

The personnel that were responsible for tracking the daily activities of the shift personnel are knowledgeable, reliable individuals. As such, it was assumed that the information developed through this research was an accurate reflection of the shifts activities.

Analysis of Fire Loss Data

An analysis of fire loss data was conducted for the years 1988-1997. From this data, comparisons were made to identify possible trends in the Sumner Fire Department's fire rate and loss experience. Specifically, total building fires per year, number of fires per one thousand population, total fires per one thousand buildings, and total value threatened versus total value lost was tracked, which provided an annual loss percentage.

Limitation

The single largest limitation with this method is the fact that all buildings fires were considered, not simply the commercial, industrial, assemble, etc., structures. Yet the structures that an inspection program would impact are those types of structures, which would not include single-family residential structures.

Secondly, in 1992, the Sumner Fire Department was successful in passing a strict fire alarm ordinance, which may influence the dollar loss figures. No attempt was made to differentiate the affect on the data collected.

RESULTS

The first research question asked, "Does the current company-level inspection program demonstrate the efficient use of fire department resources?". The second research question

asked “What affect does the inspection program have on the daily workload of each shift?”. The first two procedural methods, both singularly and collectively, were directed at answering those two questions.

The first research procedure, an interview of Assistant Chief/Fire Marshal Tom Poste, took place on April 24, 1998. A series of questions were asked. The answers provided within the document are based on notes taken during this interview.

Question #1 asked: How many years have company-level personnel been conducting fire prevention inspections in Sumner? Chief Poste indicated that he has been an employee of the fire department since 1968 and that the company-level personnel were conducting inspections at that time and have continued since.

Apparently, the program was not well organized initially. The chief would simply call someone to his office and direct the individual to go inspect a particular building. In 1970, the assistant chief organized the program, identifying buildings to be inspected annually and dividing that workload among the company-level personnel.

Question #2 asked: Describe in detail the current company-level inspection program. Chief Poste indicated there are approximately seven hundred occupancies that are part of the on-going inspection program. Of that, three hundred, sixty of the occupancies are part of the regular inspection program and three hundred, forty are part of the self-inspection program.

Of the three hundred, forty occupancies in the self-inspection program, one-quarter actually receive a regular inspection on an annual basis. This allows for an on-site inspection every fourth year in each of those low hazard occupancies. The combination of the regular and assigned self-inspection occupancies create approximately four hundred, forty-five

occupancy inspections each year, for which the company-level personnel are responsible. This inspection workload is divided as equally as possible among the three shifts, resulting in each shift being responsible for roughly one hundred, forty-eight regular inspections each year.

The crews are also responsible for up to two re-inspections per occupancy. If an initial inspection reveals any code violations, the responsible crew will make two additional attempts, one month separating each inspection, to have the violations corrected. If after two re-inspections the violations have not been corrected, the occupancy is turned over to the Fire Marshal for further action.

Each year, the crews will average a total of approximately three hundred re-inspections, collectively.

Questions #3 asked: Describe how this program has changed over the years. Chief Poste indicated there have been a few changes. The first would be the addition of personnel. When the program first began, there were one or two firefighters on-duty each day. Currently, there is a minimum daily staffing level of three and sometimes there are four personnel on-duty. However, there has been no full-time fire inspectors added to the ranks.

There have also been additional structures that have been added. These additions were created through new construction and through annexation of property previously located outside the city limits.

The biggest change was the implementation of the self-inspection program in 1995. This program targeted the low hazard occupancies and has allowed fire department personnel to spend additional time with the remaining occupancies.

Question number four asked: What initial and/or on-going training was/is provided to the

company-level personnel? Chief Poste indicated that there had been no formalized training of fire department personnel. Much of the ability that current personnel acquired was through on-the-job training, acquired by conducting inspections. Several individuals did take an initial class on use of the Uniform Fire Code, which occurred ten or twelve years ago.

There has also been no consistent on-going training provided to personnel.

Question #5 asked: Describe the technical nature of the inspections being done today in comparison with inspections done in years past. Chief Poste indicated that significant changes have occurred within the Uniform Fire Code. Three examples were changes dealing with high-piled storage, hazardous materials storage, and fire alarm systems. As such, the personnel have many additional items that they must be knowledgeable about.

Based upon the information provided by Assistant Chief Poste, it appears that the Sumner Fire Department is utilizing their available resources in an efficient manner. Without fire prevention personnel, the fire marshal would be singularly responsible for conducting all of the regular and follow-up inspections. The likelihood that one individual could complete that task is doubtful.

Yet, the company-level inspection program is still only one program. Does it, in and of itself, demonstrate efficiency? What else are these personnel involved with or responsible for?

While it provides additional indication on the efficient use of available resources, the second procedural method was more specifically designed to answer the second research question which asked, “What affect does the inspection program have on the daily workload of each shift?”.

The analysis of the workload resulted in the identification of eight specific tasks that the

company-level personnel must manage over a twelve month period.

The first task deals with emergency response. The daily activity sheets indicated that each response took an average of one hour to complete. This was based on tracking the response from the time of initial dispatch until the unit was back in quarters and all required reports were completed. Table 1 uses a five year response average to illustrate the annual workload.

Table 1

Emergency Response Workload

Avg. Annual Response	Avg. Time per Response	Avg. Annual Hours
1608	1.0 hours	1608

The second item from the daily activity sheet covers training issues. The shift personnel are expected to average one hour of training each shift or ten hours per month. Table 2 provides the average annual hours.

Table 2

Annual Training Hours

Total Days	Avg. Hours per day	Total Hours
365	1.0	365

Item number three from the daily activity sheet deals with maintenance issues. This includes station and apparatus maintenance, both daily duties and special projects. Table 3 provides the average annual hours.

Table 3

Annual Maintenance Hours

Total Days	Avg. Hours per day	Total Hours
365	1.0	365

Item number four from the daily activity sheet covers both hydrant testing/maintenance and hose testing. Table 4 provides the estimated annual hours.

Table 4

Annual Hose & Hydrant Testing

Task	Item	Avg. Time per Item	Avg. Annual Hours
Hydrants	250	20 minutes	85
Hose	6*	4 hours	24

*** Indicates six relatively equal hose lots**

Item number five from the daily activity sheet covers special assignments. Many of the shift personnel are responsible for specific duties or assignments within the organization. Each of these consumes personnel time on a regular basis. Table 5 provides the annual hours for these assignments.

Table 5

Special Assignment Hours

Number of Assignments	Time per Shift	Annual Hours
10 *	15 minutes	100

*** These assignment are spread over each of the shifts**

The final item from the daily activity sheet covers the issue of inspection activities. Table 6 provides the average annual total.

Table 6

Annual Inspection Activities

Inspection Type	Number of Inspections	Time per Inspection	Total Hours
Regular/Initial	445	1.0 hour	445
Re-inspections	300	.75 hours	225

Table 7 provides a compilation of all of the annual tasks, as identified by the activity sheets.

Table 7

Workload Analysis Totals

Activity	Annual Hours
Emergency Response	1608
Training	365
Maintenance	365
Hydrant/Hose Testing	109
Special Assignments	100
Inspections	670
TOTAL	**3217**

Table 8 further clarifies the workload analysis in three ways:

1. Analysis of Sumner Fire Department response data indicates that forty-eight percent of the emergency responses take place between the hours of 8:00 AM to 5:00 PM, Monday through Friday.
2. Analysis of the daily activity sheets indicates that ninety-seven percent of the Training, Maintenance, Testing, and Special Assignments activities take place between the hours of 8:00 AM to 5:00 PM, Monday through Friday.

3. Analysis of the daily activity sheets indicates that one hundred percent of the inspections occur between the hours of 8:00 AM to 5:00 PM, Monday through Friday.

This provides a more accurate analysis for the purpose of evaluating the company-level inspection program.

Table 8

Revised Workload Analysis

Activity	Annual Hours
Emergency Response	772
Training	354
Maintenance	354
Hydrant/Hose Testing	106
Special Assignments	97
Inspections	670
Total	2353

The total hours provided by the workload analysis was compared with the total hours available for performing the activities. Using the same time frame, the total hours available, 8:00 AM to 5:00 PM, Monday through Friday, minus one and one-half hours each day for lunch and breaks, is one thousand, nine hundred, fifty (1,950).

The data provided by the analysis of the workload of the company-level personnel provides answers to the first two research questions. Relative to question number one, regarding efficiency, the data would indicate an organization that is having problems completing all of its work. Clearly, with a finite amount of time available, one or more of the listed tasks is not being completed, or, many of them are being completed poorly. In that regard, their is clearly a lack of efficiency.

The question regarding the impact of the inspection program on the workload is clearly demonstrated in the data. While an argument could be made about the elimination of any of the listed activities, the elimination or alteration of the inspection program would result in an ability to apply more time to other things. Clearly, as the number of emergency responses increase, the time to accomplish other activities will decrease. Add to that the ever-increasing mandates on training and the problem, as it currently exists, will be multiplied.

The third and final research question asked, "Has the program resulted in a measurable benefit to the community?".

The analysis of Sumner Fire Department's fire incident data for the years 1988-1997 was conducted in order to answer that question. What the research indicates is a lack of a clearly measurable benefit.

The data collected demonstrates no definitive advance or decline in the number of fires, or in the average annual dollar loss. In fact, the first seven years of data result in an overall increase of six-tenths of one percent in the annual fire loss. Not until 1995 does there appear to be any positive affect in the loss figures. However, to imply that this change was a result of the inspection program may be misleading.

As was provided in the interview with Assistant Chief Poste, it was in 1995 that the City of Sumner passed a strict fire alarm ordinance. Could this in fact be the cause of the decline in the annual dollar loss percentage seen in 1995?

Indications, based upon increases in 1996 and 1997, are that the inspection program is having little positive effect on the community's fire problem. Without going back to the beginning of this program, the only way to know would be to stop or severely curtail the

inspections currently being done by the company-level personnel.

The information generated by the collected date is provided below, in Table 9.

Table 9

Fire Data Analysis

YEAR	FIRES PER 1000 POPULATION	FIRES PER 1000 BUILDINGS	TOTAL VALUE THREATENED	TOTAL VALUE LOST	LOSS RATIO
1988	2.45	5.5	$13,794,000	$491,805	3.6%
1989	2.75	6.3	$10,305,000	$561,849	5.4%
1990	2.52	5.7	$13,950,000	$535,094	3.8%
1991	2.56	6.2	$15,492,000	$580,809	3.7%
1992	2.74	6.7	$13,814,000	$656,718	4.7%
1993	2.76	6.7	$18,378,000	$756,091	4.1%
1994	2.98	7.3	$20,250,000	$866,934	4.2%
1995	2.60	6.6	$21,084,000	$647,377	3.0%
1996	2.75	6.6	$23,316,000	$732,106	3.1%
1997	2.82	6.7	$25,296,000	$841,008	3.3%

DISCUSSION

This discussion is divided into four parts. The first three will discuss each of the issues explored by the research questions. The final portion will discuss the issues in relationship to their implications on the Sumner Fire Department.

Efficient Use of Resources

Since the 1970's, when public dissatisfaction with government became apparent, giving rise to tax-reducing legislation that has found its way into many states and municipalities, the fire service has increasingly demonstrated increased productivity. As productivity has improved, along with clear mandates from the voters to continue these efforts, public entities, including the fire service, have demonstrated ever-increasing efficiency in the use of its available resources.

The fact that company-level personnel are regularly performing duties heretofore relegated to separate divisions within an agency is indicative of the industry's response to the voters.

One of the ways the fire service has increased its efficient use of resources has been the advent of company-level inspection programs. As provided by the literature review, many fire service agencies conduct this type of program. It is programs such as this that have re-positioned the fire service as a truly efficient and productive public agency.

The research demonstrated that Sumner Fire Department is no less responsive to its constituency. Sumner Fire Department is an austere organization that is demonstrating efficiency on a daily basis. In fact, the results of the research present information suggesting the agency may be expecting too much of its personnel. This is best illustrated in the answers provided in answering research question number two.

Organizational Impact of Workload

There were two things that became very clear as a result of the research. Both are discussed herein.

The first deals with fire service workloads in general. Second only to the issue of training, added programs and their impact on an agency's workload was a repeated concern. In simply conducting the literature review, multiple documents commented on company-level inspection programs and their impact, often viewed as negative, on the workload for which company-level personnel were responsible (Campbell, 1994; Holmerud, 1991; Marinucce, 1987; McMath, 1991; Pollard, 1990). It would appear that any agency conducting a program of this type must take the issue of workload into consideration.

The second issue resulting from the research was the realization that Sumner Fire

Department has a problem with its workload. While not directly the result of the company-level inspection program, the other identified activities most likely existed prior to implementation of the inspection program.

Additionally, there is one piece of information not previously reported in this document. The fact is, while personnel are expected to train one hour each day, in reviewing the daily activity sheets, it was discovered that personnel are not meeting this training expectation. In fact, virtually no on-duty training is being conducted. Most would consider this unacceptable.

Public Benefit from the Program

Like other company-level inspection programs, Sumner Fire Department's program has provided some inherent benefits. It has helped demonstrate the agency's interest in being a productive, efficient, and effective organization. It has benefited the firefighters by making them more familiar with occupancies to which they respond. Both of these are important benefits.

Based upon the research, a clear benefit to the community, in terms of obvious reductions in numbers of fires, has not been demonstrated. A direct benefit is implied if the results of the research is compared to the results of other studies, such as the evaluation of Bakersfield Fire Department's company-level inspection program conducted in 1994 by David R. Lugo, Jr. Specifically, when comparing the number of fires per 1000 population and the number of fires per 1000 buildings, Sumner's numbers are better. Unfortunately, Sumner's numbers, while better in terms of its experience, indicate a negative trend in nearly all areas, while Bakersfield's demonstrated positive trending.

Summary

The issue of the effectiveness of Sumner's program has not clearly been answered by the research. In order to make this determination, additional research, focused on what changes in numbers and types of code violations have occurred, needs to be undertaken. Additionally, research that separates the fires occurring in non-inspected occupancies from those occurring in buildings that are inspected must be conducted.

The research also indicates a need to re-examine the program in terms of its impact on the workload for which the company-level personnel are responsible.

RECOMMENDATION

From the data evaluated, there does not appear to be a positive trend in the frequency of fires in the City of Sumner. In order to better document the affects of the inspection program, additional in-depth research is recommended.

Additionally, the issue of the company-level personnel's workload must be addressed. It is recommended that Sumner Fire Department staff immediately reassess the program. The intent would be to alter the program to the extent that the demands of the inspection program are made manageable within the constraints of available time.

In conclusion, the need to demonstrate productivity and efficiencies is being met, as expected by the public. However, in the rush to respond to these demands, the fire service must not create situations that damage other aspects of our operations. Further, we must continually measure the results of our programs, effecting necessary and appropriate changes.

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APPENDIX A

DAILY ACTIVITY SHEET

DATE: _____ SHIFT: _____ OFFICER: ____

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